



Welcome to the *Green Power News Update*. This is a summary of the stories that ran during **August, 2015**. New stories are added throughout the month to make sure you always know what is happening in our fast-changing industry. Check back often to see what's new!

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Green Power

USDA Invests \$63 Million to Support 264 Renewable Energy and Energy Efficiency Projects Nationwide

Funding supports solar and other renewable energy projects to create jobs and promote energy independence

Agriculture Secretary Tom Vilsack today announced \$63 million in loans and grants for 264 [renewable energy and energy efficiency projects](#) nationwide that USDA is supporting through its [Rural Energy for America Program](#) (REAP).

"This funding will have far-reaching economic and environmental impacts nationwide, particularly in rural communities," Vilsack said. "Investing in renewable energy and energy efficiency projects supports home-grown energy sources, creates jobs, reduces greenhouse gas pollution and helps usher in a more secure energy future for the nation."

Source: US Department of Agriculture, 8/7/15

Contemporary Grid Issues for Photovoltaics: What, Why, How

For over a decade, the [Utility Variable Generation Integration Group](#) (UVIG) has played a key role in developing knowledge, tools, and approaches for integration of large amounts of wind generation on to utility power systems. Now, with solar exploding onto the scene, UVIG is uniquely positioned to do the same for it.

In conjunction with its Fall Technical Workshop, UVIG will present "Contemporary Grid Issues for Photovoltaics: What, Why, How" on October 13th at the Hotel Palomar in San Diego. During this one day seminar, you will learn about the following topics from industry experts:

- Status, Outlook, Issues, and Challenges
- PV System Technology
- Distribution System Impacts
- Best Practices for Distribution Systems and Bulk Systems
- PV Related Standards and Interconnection Process Policy

[Register](#) today, or pass this notice on to anyone in your organization that might benefit from this special UVIG offering.

Source: Utility Variable-Generation Group, 8/17/15

Advanced Grid Control Technologies Workshop Series

NREL's Energy Systems Integration team hosted workshops on advanced distribution management systems (ADMS) and microgrid controls on July 7-9, 2015. The workshops were held at the [Energy Systems Integration Facility](#) (ESIF) on the NREL campus, and included a technology showcase featuring projects conducted at the ESIF and tours of the ESIF and the National Wind Technology Center. These were the first in a series of workshops focused on advanced grid control technologies.

Source: National Renewable Energy Laboratory, 8/14/15

Green Power Network News for July 2015

This update summarizes recent green power marketing activity, including news and information on competitive green power marketing, utility green pricing programs, renewable energy certificates, green power purchasing, and related market activity. Additional information on green power markets and products, as well as links to the companies mentioned below, can be found on the U.S. Department of Energy's Green Power Network [website](#).

New Publications

- [NREL Report: Renewable Electricity Use by the U.S. Information and Communication](#)

Technology (ICT) Industry

- [NREL Factsheet: Renewable Electricity: How do you know you have it?](#)

Announcement

- [Early Bird Extended for Renewable Energy Markets 2015](#)

News

- [New York State to Allow Shared Renewables Projects](#)
- [City of Baltimore to be Powered by Solar Energy](#)
- [HP to Power Texas Data Centers with Wind Energy](#)
- [Washington D.C. Signs 20-Year PPA for 35% Wind Power](#)
- [LCRA to Purchase More Wind Energy](#)
- [Denver's City Buildings to be Powered by SunShare Community Solar](#)
- [Amazon Web Services to Purchase 208-MW of Wind in North Carolina](#)
- [Facebook Powering New Texas Data Center with Wind](#)

Renewable Energy RFPs

- [The Tribal Council for the Soboba Band of Luiseño Indians](#)
- [Allegany County, Maryland](#)
- [Southern California Edison](#)
- [Northern States Power Company](#)
- [Dairyland Power Cooperative](#)

Source: EPA Green Power Network, 8/4/15

Download webinars on energy policy from Regulatory Assistance Project

The Regulatory Assistance Project (RAP) offers innovative and creative thinking to reach practical solutions to better align energy regulation with economic and environmental goals.

Webinars on RAP's research cover regulatory and market policies promoting economic efficiency, environmental protection, system reliability and fair allocation of system benefits among consumers. Visitors can download past webinars on RAP's website.

Source: The Regulatory Assistance Project, 8/6/15

5 Energy Education Ideas to Spark Learning Beyond the Classroom

Did you know energy is everywhere? Think about it: energy is clearly a physics concept, but is that all it is? Like turning off the lights when you leave home, our everyday decisions impact energy use. Energy has played a pivotal role throughout history and will continue to shape our future. There are clear tie-ins for energy education everywhere you look, from Art and English to Science and Math, because energy is everywhere.

As students head back to school this fall, help create energy awareness with these need to know teaching tips from the Energy Department.

Source: DOE Office of Energy Efficiency and Renewable Energy, 8/4/15

Catalyst Road Show schedule announced

Register for our upcoming Jamathon events in a city near you. As you prepare your video pitches for the Business Innovation Contest, please vote and comment on the active and popular ideas on the Ideation page. SunShot Catalyst is an open innovation program that allows the public to rapidly create and develop products and solutions that address near-term challenges in the U.S. solar marketplace through prize challenges. See the winners from the last cycle of the program.

Source: DOE Sunshot Initiative, 8/1/15

Visit U.S. DOE EERE [Green Power Network](#) for more information.

Reports and Studies

Energy Storage and Electricity Markets: The value of storage to the power system and the importance of electricity markets in energy storage economics

Despite the fact that energy storage technologies have the capacity to benefit every segment of the power system, from generation to end-use, it can still be difficult to cost effectively deploy storage across much of the U.S. In order to identify the emerging opportunities and remaining barriers to energy storage deployment, "*Energy Storage and Electricity Markets: The value of storage to the power system and the importance of electricity markets in energy storage economics*" introduces existing electricity markets where storage has begun to play a significant role. This report examines how these emerging energy storage markets have developed and the potential for realizing additional value streams through new market mechanisms.

Source: Clean Energy Group, 8/12/15

EERE 2014 Wind Technologies Market Report Finds Wind Power at Record Low Prices

[2014 proved to be a strong year for the wind industry](#) as the United States remained a global leader in wind energy. Overall, the nation is continuing its wind installation boom, and is also putting up larger turbines that generate more wind power. Domestic wind manufacturing for large wind turbine components such as blades and

towers remains strong, creating more American jobs for American workers. And the best part of all this recent growth is that the price of wind energy in the United States has fallen to record lows.

Source: DOE Office of Energy Efficiency and Renewable Energy, 8/10/15

NREL Releases Technology Baseline of Cost and Performance Data with Standard Scenarios Report

Until now, consistent cost and performance data for electricity generation technologies were difficult to find and they could change over time for certain technologies. With the recently launched Annual Technology Baseline, the National Renewable Energy Laboratory (NREL) now provides a single data set of current and projected technology cost and performance information for renewable generation technologies.

NREL provided the data for renewable generation technologies, and the Energy Information Administration provided data for conventional technologies. All the data have been thoroughly reviewed by both internal and external experts. Our goal is to revise and refine the data set annually using the best publically available information.

At the same time, NREL released a suite of scenario projections for the U.S. electric sector to 2050. The 2015 Standard Scenarios Annual Report covers a range of future trajectories for generation technology costs and other key drivers such as load growth and natural gas prices. And, the scenarios are intended to be used to identify possible futures of the U.S. electricity sector in which specific energy system issues can be considered.

Read more [NREL Energy Analysis](#).

Source: National Renewable Energy Laboratory, 8/17/15

California Solar Initiative SASH and MASH Low-Income Evaluation

The California Public Utilities Commission (CPUC) hired Navigant Consulting, Inc., (Navigant) to perform in-depth examinations of the design, delivery, operations, and impact of the two California Solar Initiative (CSI) low-income programs. The CPUC established the low-income solar programs with D.07-11-045, the Single Family Affordable Solar Homes Program, the "SASH" decision, and D.08-10-036, the Multifamily Affordable Solar Housing program, the "MASH" decision in response to Assembly Bill 2723. In D.06-08-058, the CPUC instituted periodic evaluations, biennial reviews for the SASH and MASH programs through the duration of the CSI Program.

In early 2011, Navigant issued two reports, the [CSI SASH and MASH Program Administrator Performance Assessment Report](#) and the [CSI SASH and MASH Market Assessment Report](#). Navigant issued the [CSI SASH Biennial Report](#) and [CSI Mash Biennial Report](#) in June and the [CSI SASH & MASH Impact and Cost Benefit Report](#) in August 2011.

Source: California Public Utilities Commission, 8/17/15

Closing the Solar Income Gap: Greater Access, Proven Policies, and Community Engagement

Continued and precipitous cost reduction combined with improved financing options and regulatory processes, the solar boom continues with a record 40GW of solar power added to the world's grids in 2014 bringing the global cumulative capacity to over 178GW. The U.S. also celebrated a record year with the largest PV installation in a single year. However, the benefits of such solar momentum seem yet to spread across the spectrum of U.S. household incomes. More than 49 million households that earn less than \$40,000 of income per year make up 40 percent of all U.S. households, but represents less than 5 percent of solar installations.

Source: Solar Outreach Partnership, 8/12/15

Load Defection: How Solar+Storage Will Change the World

August 20
3-4pm ET

Rocky Mountain Institute's first solar+storage report, titled "[The Economics of Grid Defection](#)," fueled speculation about the "utility death spiral" that could result if more and more people elected to disconnect from the grid. Now RMI has a new report, "[The Economics of Load Defection](#)," that describes a more likely outcome: what will the grid look like when many customers remain connected, but can increasingly self-supply a large portion of their electricity?

Clean Energy Group will be hosting a webinar discussion on this topic featuring Rocky Mountain Institute's Leia Guccione and Jesse Morris.

This webinar is a presentation of Clean Energy Group's [Resilient Power Project](#).

Source: Rocky Mountain Institute, 8/17/15

NREL Report Examines Energy Use in Cities and Proposes Next Steps for Energy Innovation

What U.S. cities are doing to reduce their energy use is outlined in a new report from the Energy Department's National Renewable Energy Laboratory (NREL) that sets the stage for broader discussion and analysis. Given increasing urbanization and their large energy footprint, cities are a prime focal point for establishing a clean energy future.

The report, "[City-Level Energy Decision Making: Data Use in Energy Planning, Implementation, and Evaluation in U.S. Cities](#)," analyzes and presents information learned from a sample of 20 cities across the United States, from Los Angeles to Boston, including a diverse sample of population size, utility type, region, annual greenhouse gas reduction targets, vehicle use, and median household income.

Source: National Renewable Energy Laboratory, 8/5/15

Tracking the Sun VIII: The Installed Price of Residential and Non-Residential Photovoltaic Systems in the United States

Now in its eighth edition, Lawrence Berkeley National Laboratory (LBNL)'s Tracking the Sun report series summarizes trends in the installed price of grid-connected solar photovoltaic (PV) systems in the United States. The [latest report](#) focuses on residential and nonresidential systems installed through year-end 2014, with preliminary trends for the first half of 2015. Among the changes and enhancements in this edition, the report focuses solely on residential and non-residential PV systems; and data on utility-scale PV appears in LBNL's companion Utility-Scale Solar report series.

Source: Lawrence Berkeley Laboratory, 8/18/15

Scientists Break This Virtual Power Grid to Save the Real One

A sprawling high-tech facility in Colorado helps integrate solar power into outdated systems—without causing blackouts or explosions in the process. We got exclusive access to find out how.

The state of Hawaii could be a brochure for a future powered by renewable energy: Photovoltaic panels are as ubiquitous as swimming pools. But despite being an energy model for the rest of the U.S., Hawaii has had trouble actually using the power the panels provide. During peak hours the sun contributes so much electricity that it threatens to destabilize the entire grid.

To help utility companies conquer challenges such as these, in late 2013 the U.S. Department of Energy opened a \$135 million test facility that can simulate almost any electrical-grid problem.

Source: Popular Mechanics, 7/20/15

Hydro Newsletter - Volume 2, Issue 8

In our eighth installment of Van Ness Feldman's Hydro Newsletter for 2015:

- Legislative Update
- Senate Finance Committee Supports Two-Year Extension of
- Production Tax Credit and Investment Tax Credit
- FERC Grants Annual Charges Appeal and Issues 2015 Bills
- FERC Issues Original Licenses for Two New Projects in Washington
- For more information

Van Ness Feldman's hydroelectric practice provides comprehensive legal, policy, and business advisory services for the full range of issues facing the hydropower industry. If you would like additional information, please contact any member of our [hydroelectric practice](#) in Washington, DC or in Seattle, WA.

Source: Van Ness Feldman, 07/31/15

Deploying Distributed Energy Storage

Near-Term Regulatory Considerations to Maximize Benefits

Since the market for distributed energy storage is still in its infancy, there is a significant need for regulatory guidance and proactive policies to ensure a smooth integration into the existing electrical system. Energy storage could offer additional benefits to customers, both by helping them directly manage their energy use and offering distribution system managers new tools to help maintain and even enhance the functionality of the electricity system.

"IREC developed this report to help identify key regulatory changes that states may want to consider in the near term in order to facilitate rollout of distributed storage in a manner that captures the greatest benefits and promotes a healthy market for storage services," said Sky Stanfield, lead report author, who represents IREC in regulatory matters.

Source: Interstate Renewable Energy Council, 8/5/15

Solar Power for Your Home: A Consumer's Guide

Are you thinking about adding a solar energy system to your home to generate electricity? If so, this consumer guide will help you explore various options, ask important questions and make a well-informed decision.

Source: Louisiana State University Ag Center, 2/20/15

Find more [publications and webinars](#).

Funding

Current Federal Funding Opportunities

Van Ness Feldman, a law firm specializing in energy and environmental policy, has released funding opportunities for Aug. 18, 2015. Program areas include:

- Academic Programs
- Alternative & Renewable Energy
- Biofuels
- Carbon Capture & Storage
- Coal
- Cybersecurity
- Department of Defense Energy
- Electricity & Transmission
- Energy Efficiency
- Environment
- Multi-disciplinary Research
- Native Affairs
- Natural Gas & Oil
- Nuclear Energy
- Pipeline and Hazardous Materials Transportation
- Public Lands, Oceans, & Parks
- Transportation & Infrastructure
- Water
- Wildlife, Conservation, & Fisheries

Source: Van Ness Feldman, 8/18/15

Find more [funding sources](#).